Bare NPs and semantic incorporation: objects of *na-sja* verbs at the syntax-semantics interface

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1. This paper is concerned with two seemingly similar but – as we show in this paper – quite distinct structures in Russian involving verbs containing the prefix *na-* and the intransitivizing *-sja*, one structure containing an instrumental noun phrase and the other – a genitive noun phrase, cf. (1a,b). We demonstrate that these two structures are radically distinct, both syntactically and semantically: the INSTR phrase is an adjunct of instrument/means, while the GEN phrase is a complement of the verb which denotes a property. Furthermore, we argue that while the INSTR phrase is a full DP, the GEN phrase is a property-denoting Small Nominal in the sense of Pereltsvaig (2006), undergoing semantic incorporation.

2. Syntactic contrasts/Small Nominals. Despite the apparent similarity, the two structures are distinct in that the GEN phrase is much more restricted than the INSTR: it does not allow D-level elements, such as reference-denoting demonstratives, pronouns and proper names; related to this is the fact that the GEN phrase cannot contain certain adjectives, illustrated in (2), which (following Pesetsky 2007) we take to be merged in the D-layer as well. Moreover, the GEN phrase does not allow any expressions of quantity, such as numerals, weak quantifiers, quantity nouns or container nouns, cf. (3a-c). Furthermore, the GEN phrase is restricted to mass and plural count nouns, while singular count nouns are excluded, cf. (4); assuming Borer's (2004) analysis of the count/mass distinction as associated with the Cl (Classifier) node in syntax, we conclude that the GEN phrase lacks the projections of DP, NumP and ClP and is maximally a bare NP. In line with the diagnostics discussed in Pereltsvaig (2006), being a bare NP the GEN phrase cannot serve as a controller or as an antecedent of anaphora. Following Pesetsky (2007), we propose that that the GEN phrase surfaces with genitive Case-marking by virtue of being a bare NP.

3. Semantics of the genitive NP. The special syntactic properties of the GEN phrase are related to its semantics. We propose that this phrase denotes a property and is of the semantic type $<e,t>$, which is the default interpretation of bare NPs. We further propose that it combines with the V head by means of semantic incorporation, along the lines of Farkas and de Swart (2003) (or pseudo-incorporation in the sense of Dayal 2007). Similarly to other types of incorporated nominals cross-linguistically, the GEN phrase exhibits reduced morpho-syntax, cannot receive a referential interpretation and is scopally restricted. For instance, (5) means that Lena has seen an eyeful of French movies in general; it cannot mean that there is a specific set of French movies such that Lena has seen an eyeful of these movies. In addition, similarly to semantic incorporation in West Greenlandic, the Russian construction investigated here involves an intransitive (*sja*-marked) form of the predicate. Finally, the proposed analysis relates the GEN phrase to other types of GEN complements in Russian, including nominals in Genitive of Negation and Intensional Genitive, which have been argued to denote properties (cf. Partee and Borshev 2004, Kagan 2005).

4. Semantics of the construction. The two constructions in (1) also differ in their patterns of entailment: the structure with the INSTR phrase entails the one without the INSTR phrase, while the structure with the GEN phrase does not entail one without the GEN phrase, e.g., (1a) entails (6) but (1b) does not. This, we propose, results from the fact that the GEN and the INSTR phrase interact with the predicate in different ways, both semantically and syntactically. GEN is a semantically incorporated nominal which syntactically functions as the complement of V. (The latter hypothesis is further supported by the fact that it must correspond to the ACC argument of the "bare" verb (lacking *na-* and *-sja*), cf. (7).) In contrast, INSTR is an adjunct that attaches at a higher position. We assume that semantically, the morphemes *na-* and *-sja* apply to the predicate as a single complex unit (this view is supported by the existence of the verb *napit'sja* in the absence of both **pit'sja* and **napit'*). The semantics of this unit is formalized in (8). The unit semantically applies to the predicate denoted by the VP. A sentence with a *na-sja*-verb entails that the subject was engaged in the process denoted by the VP and reached the state of having had enough of this process. Thus, in (1b), the result state is one of not wanting to eat any more burgers, whereas in (6) and (1a), it is the state of not wanting to eat, i.e. not being hungry (and the INSTR phrase simply adds the means of achieving this state). Since not wanting any burgers does not entail not being hungry, (1b) does not entail (6).

5. Summary. The study of *na-sja* verbs in Russian allows us to draw insightful conclusions about the interaction of syntactic and semantic properties of bare NPs and the overall syntax-semantics interface.

(1)   a.   Ja   najelas'   kotletami.
             I   *na*-ate-*sja*   burgers.INSTR
             'I stuffed myself with burgers / I satisfied my appetite on burgers.'

        b.   Ja   najelas'   kotlet.
             I   *na*-ate-*sja*   burgers.GEN
             'I ate my fill of burgers.'

(2) * Ja   naelas'   {ostal'nyx /vsex   /sledujuščix   /pervyx /dannyx}   kotlet.
        I   *na*-ate-*sja* {remaining /all   /following   /first   /given}   burgers

(3)   a.   Ja   najelas'   pjatju   kotletami   / *pjati   kotlet.
             I   *na*-ate-*sja*   five.INSTR   burgers.INSTR / *five.GEN   burgers.GEN

        b.   Ja   najelas'   djužinoj   kotlet   / *djužiny   kotlet.
             I   *na*-ate-*sja*   dozen.INSTR burgers.GEN / *dozen.GEN burgers.GEN

        c.   Ja   napilas'   stakanom   vody   / *stakana   vody.
             I   *na*-ate-*sja*   glass.INSTR   water.GEN / *glass.GEN water.GEN

(4)   a.   Ja   najelas'   kotletami   / kašej   / jablokom.
             I   *na*-ate-*sja*   burgers.INSTR / porridge.INSTR   / apple.INSTR

        b.   Ja   najelas'   kotlet   / kaši   / *jabloka.
             I   *na*-ate-*sja*   burgers.GEN   / porridge.GEN / *apple.GEN

(5)   Lena   nasmotrelas'   francuzskix   fil'mov.
        Lena   *na*-watched-*sja* [French   movies].GEN
        'Lena has watched French films to the limit.'

(6)   Ja   najelas'.
        I   *na*-ate-*sja*
        'I ate my fill/I had a bellyful / I am stuffed full.'

(7)   Deti   naigralis'   novymi igruškami / *novyx igrušek.   (cf. *Deti igrali novye igruški.*)
        children *na*-played-*sja* [new toys].INSTR / *[new toys].GEN
        'The kids have had enough of playing with new toys.'

(8) $\lambda P \, \lambda x \, \lambda y. \, \exists e \, \exists e'$ [P(e) & agent (x, e) & cause (e, e') & has-had-enough-of-P (e') & experiencer (y, e') & x=y]
        (where P is the property denoted by VP)

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